

UNIVERSITY OF TECHNOLOGY, SYDNEY

TOWARDS A UBIQUITOUS GOVERNMENT: THE MOVE TO MOBILE SERVICES AS PERCEIVED BY THE END USER

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by

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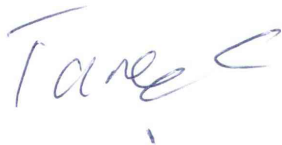
FACULTY OF INFORMATION TECHNOLOGY

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I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.



Tarek El-Kiki



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ABSTRACT

Mobile technologies, by virtue of their pervasive and powerful existence, are relentlessly transforming the way in which people work and play as people become contactable anytime anywhere. Mobile devices are becoming indispensable tools of verbal and data communication at present, and will be even more essential to the following generations.

The use of mobile technologies offers governments the possibility to render their services to the end users (constituents) in a more effective and efficient fashion. There are numerous factors that influence the effectiveness of government mobile services. These factors can be viewed from a few perspectives such as financial, administrative, social and technological; this research thoroughly analyses the end users' perspective towards the effectiveness of mobile government services.

Mobile government services are those services rendered to end users, be they citizens or businesses, through the use of mobile communication technology within the government administration. The main research question is what does 'successful government mobile service' mean to the end user? Both qualitative and quantitative methodologies are employed to establish the answer to this question.

In order for such answer to be accomplished, an extensive review of the available literature was performed to highlight the research problem as the first step in the research process. Subsequently, experts in the fields of mobile government and electronic government were consulted through a web-based survey that also

worked as an online interview as several participants were willing to undertake further discussions on the survey findings. The findings of this survey were aligned and compared with the outcomes of the literature review resulting in a useful classification of the mobile service success factors as well as pinpointing the barriers to such success.

The following step was devising two mobile service effectiveness evaluation models which employed those classified success factors as evaluation metrics. These models formed the theoretical basis for a real-world survey, through which end-users' opinions about their needs for mobile service were collected and analysed. Once these needs are fulfilled by the mobile service, satisfaction is reached, and, accordingly, these needs are considered as real success factors for the mobile service from the end-users' perspective.

According to those two mobile service effectiveness evaluation models, these success factors must satisfy one perspective, which is the end-users' (citizens & businesses), from four perspectives: Citizens & Businesses, Operational & Internal Business, Innovation & Learning and Financial & Economic, if a comprehensive effectiveness evaluation is required.

In order to build a realistic picture about the practical rendering of effective mobile services by local governments, (if there were any), the researcher selected three local Sydney councils to conduct a case study.

The literature review, the experts and users surveys, as well as case studies have all contributed to a practical framework that represents a checklist for government mobile service providers to adopt and adapt according to their mobile services provisions. Accordingly, this study contributes with its outcomes,

such as mGovernment theoretical management framework, and the devised effectiveness evaluation tools, to enrich this novel field of work and research; the field of mobile government services.

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*“New conditions impose new requirements on
government and those who conduct government”*

Franklin D. Roosevelt